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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,179	10/20/2003	Lawrence O. Sims	19692.1	2709

25854 7590 11/16/2005

BRYAN W. BOCKHOP, ESQ.
2375 MOSSY BRANCH DR.
SNELLVILLE, GA 30078

EXAMINER	
WERNER, JONATHAN S	

ART UNIT	PAPER NUMBER
3732	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/689,179	SIMS ET AL.	
	Examiner	Art Unit	
	Jonathan Werner	3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/11/05*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) *13-24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/18/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, Claims 1-12 in the reply filed on 10/11/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). An action on the merits of claims 1-12 follows below:

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 1/18/05 was filed before the mailing of a first Office Action on the merits. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 6, 8 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Hagenbuch (2002/0025506). In re claim 1, Hagenbuch describes the preparation of an abutment system comprising the steps of forming a curable hybrid

ceramic material into a shoulder (4,5) about the base portion of the abutment (top half of 3); partially curing the hybrid ceramic material so as to form an initially cured shoulder (paragraph 28); shaping the initially cured shoulder to a desired shape (par 35); and completely curing the shoulder (par 35). In re claim 4, before completely curing the hybrid ceramic material, Hagenbuch discloses removing an amount of said material (par 35). In re claim 6, the hybrid ceramic material disclosed comprises at least 85% porcelain (i.e. "Barium glass filler (silanized)" in paragraph 37). In re claim 8, Hagenbuch discloses that the hybrid ceramic material further comprises a pigment (par 24). In re claims 10 and 11, the curing step comprises subjecting the shoulder to heat and more specifically, Hagenbuch discloses a particularly preferred glass-transition temperature of "more than 100° C" for the hybrid ceramic material (par 27).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 2, 3, 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagenbuch in view of Braiman (5,346,397). In re claim 2, Hagenbuch discloses a method for preparing an abutment system as previously described, but fails to disclose the step of applying an opaque material to the abutment. Braiman, however, teaches the use of an opaque paste (14) on an abutment prior to forming the curable hybrid ceramic material into a shoulder about the base portion of the abutment. Therefore, it would be obvious to one having ordinary skill in the art at the time of the applicant's invention to apply an opaque material to the abutment in order to firmly bond said abutment with the curable hybrid ceramic material and still look like a normal colored tooth as taught by Braiman. In re claims 3 and 5, Hagenbuch discloses a method for preparing an abutment system as previously described, but fails to disclose adding additional hybrid ceramic material to the initially cured shoulder. Braiman, however, teaches adding additional ceramic material to the shoulder (claim 5). Therefore, it would be obvious to one having ordinary skill in the art at the time of the applicant's invention to add additional ceramic material to the initially cured shoulder in order to assure the outer porcelain layer will not become overly compressed as taught by Braiman. In re claim 12, Hagenbuch discloses a method for preparing an abutment system as previously described, but fails to disclose the step of polishing the shoulder.

Braiman, however, teaches the step of polishing (col 2, ln 35-38). Therefore, it would be obvious to one having ordinary skill in the art at the time of the applicant's invention to polish the fully cured shoulder in order to have a smooth surface that will not irritate a user's mouth as taught by Braiman.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hagenbuch. Hagenbuch discloses the claimed invention except for the specific percentage of porcelain present in the hybrid ceramic material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the hybrid ceramic material comprise 92% porcelain, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hagenbuch in view of Ibsen (5,683,249). Hagenbuch discloses a method for preparing an abutment system as previously described, but fails to disclose the step wherein the hybrid ceramic material is partially cured by subjecting said material to ultraviolet light. Ibsen, however, teaches curing a polymerizable material by ultraviolet light. (col 18, ln 16-20). Therefore, it would be obvious to one having ordinary skill in the art at the time of the applicant's invention to cure the hybrid ceramic material using ultraviolet light in order to initiate polymerization of the material as taught by Ibsen.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to included form PTO-892 for all additional pertinent prior art related to abutment systems and dental implants.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Werner whose telephone number is (571) 272-2767. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jonathan Werner
Examiner
AU 3732

JSW
11/3/05

MELBA N. BUMGARNER
PRIMARY EXAMINER